## Contents of Ecological Modelling, Vol. 60

VOL. 60 NO. 1 JANUAR	Y 1992
Substrate consumption by an activated sludge with changing bacterial size and for V.B. Vasiliev and V.A. Vavilin (Moscow, Russia)	
Modelling the influence of turbulence on phytoplankton photosynthesis  V.I. Belyaev (Sevastopol, Ukraine)	. 11
Canopy photosynthesis and transpiration estimates using radiation interception models with different levels of detail	d-
C.O. Stockle (Pullman, WA, USA)  Simulation of defoliation effects on primary production of a warm-season, semiari perennial-species grassland  N.G. Seligman (Bet Dagan, Israel), J.B. Cavagnaro and M.E. Horno (Mendoz	id
Argentina)	. 45
F. Jeltsch, C. Wissel (Marburg, Germany), S. Eber and R. Brandl (Bayreut	
Germany)	
D. Mitra, D. Mukherjee, A.B. Roy and S. Ray (Calcutta, India)	. 77
Guide for Authors	87
VOL. 60 NO. 2 MARG	CH 1992
Modelling of the shelf ecosystem	0.5
V.I. Belyaev and N.V. Konduforova (Sevastopol, Ukraine) Logical-information modelling of ecosystems	
V.I. Belyaev and M.Yu. Khudoshina (Sevastopol, Ukraine) Liénard-type equations and the epidemiology of malaria	119
H.N. Moreira (Brasília, Brazil)  Stability analysis of toxic substances within aquatic ecosystems and their effect of aquatic populations	139 on
N.L. Miller (Argonne, IL, USA)	151
Announcement	166
VOL. 60 NOS. 3/4	RIL 1992
Publisher's Announcement	i
A semi-Markov process model for migration of marine shrimp	
J.H. Matis, W.E. Grant and T.H. Miller (College Station, TX, USA)	167
M. Gatto and I. I. Ghezzi (Milano, Italy)	185

## Contents of Ecological Modelling, Vol. 60

VOL. 60 NO. 1 JANUAR	Y 1992
Substrate consumption by an activated sludge with changing bacterial size and for V.B. Vasiliev and V.A. Vavilin (Moscow, Russia)	
Modelling the influence of turbulence on phytoplankton photosynthesis  V.I. Belyaev (Sevastopol, Ukraine)	. 11
Canopy photosynthesis and transpiration estimates using radiation interception models with different levels of detail	d-
C.O. Stockle (Pullman, WA, USA)  Simulation of defoliation effects on primary production of a warm-season, semiari perennial-species grassland  N.G. Seligman (Bet Dagan, Israel), J.B. Cavagnaro and M.E. Horno (Mendoz	id
Argentina)	. 45
F. Jeltsch, C. Wissel (Marburg, Germany), S. Eber and R. Brandl (Bayreut	
Germany)	
D. Mitra, D. Mukherjee, A.B. Roy and S. Ray (Calcutta, India)	. 77
Guide for Authors	87
VOL. 60 NO. 2 MARG	CH 1992
Modelling of the shelf ecosystem	0.5
V.I. Belyaev and N.V. Konduforova (Sevastopol, Ukraine) Logical-information modelling of ecosystems	
V.I. Belyaev and M.Yu. Khudoshina (Sevastopol, Ukraine) Liénard-type equations and the epidemiology of malaria	119
H.N. Moreira (Brasília, Brazil)  Stability analysis of toxic substances within aquatic ecosystems and their effect of aquatic populations	139 on
N.L. Miller (Argonne, IL, USA)	151
Announcement	166
VOL. 60 NOS. 3/4	RIL 1992
Publisher's Announcement	i
A semi-Markov process model for migration of marine shrimp	
J.H. Matis, W.E. Grant and T.H. Miller (College Station, TX, USA)	167
M. Gatto and I. I. Ghezzi (Milano, Italy)	185

Method of application of a model to predict the light environment of individual tree crowns and its use in a eucalypt forest	
P.W. West and K.F. Wells (Sandy Bay, Tasmania, Australia)	199
Optimal harvesting of a plant-herbivore system: lichen and reindeer in northern	
Finland	
M. Virtala (Oulu, Finland)	233
FORAGE: a model of forage intake in beef cattle	
B.B. Baker, R.M. Bourdon and J.D. Hanson (Fort Collins, CO, USA)	257
A study of the interaction of virulence, resistance and resource limitation in a model of myxomatosis mediated by the European rabbit flea Spilopsyllus cuniculi (Dale)	
R.M. Seymour (London, United Kingdom)	281
On Hutchinson's competition equations and their homogenization: a higher-order principle of competitive exclusion	
P. Antonelli, X. Lin (Edmonton, Alta., Canada) and R.H. Bradbury (Canberra, A.C.T., Australia)	309
Author Indov	321